2021 Impact Report
The Alliance for Paired Kidney Donation (APKD) is a 501c3 with global reach that revolutionized kidney donation by performing the world's first non-simultaneous altruistic donor chain and the first international chain. APKD's commitment to innovation, research, education, technology and generosity, partnered with its proprietary kidney matching software powered by a Nobel Prize-winning algorithm, allows the organization to fulfill its mission of saving lives by securing a living donor kidney transplant for every patient who needs one.
Dear Friends of APKD,

I write this letter with a heart full of gratitude for a very impactful year.

We brought on new team members and moved into new offices in downtown Toledo. We said goodbye to our longtime chairman, Dave White, who has served passionately for many years, and welcomed our new chairman, Matthew Wadsworth, who comes to us from Life Connection of Ohio. We launched a new website, as well as a new branded video and webinar series, to help us spread the word of paired kidney donation. Through all this change, Alliance for Paired Kidney Donation facilitated a record-breaking number of kidney transplants.

Additionally, we developed several important partnerships. These partnerships enable us to accomplish our mission of providing living donor transplants for every kidney patient who needs one.

- Eliminating the financial burden on donors paves the way for more transplants by removing barriers like the cost of travel and lost wages. We formed a partnership with the National Living Donor Assistance Center (NLDAC) to provide seamless support for all donors, regardless of income level.

- Other vital partnerships include Shore and MedSleuth, which will empower our software to maximize the number of matching possibilities across the United States.

- We teamed up with MediGO to monitor lifesaving organs during transport at home and abroad in real-time.

- Our partnerships with transplant centers are the most important partnerships of all. One of the best examples of the power of partnership happened in the fall of 2021 when a single altruistic donor began a seven-way exchange across the eastern U.S. that involved six transplant centers. This story was featured nationally on the Today Show on NBC in early 2022.

- In July 2021, we partnered with Israel and the UAE to facilitate a historic three-way kidney exchange between these countries that saved the lives of three mothers. This story was published in USA Today. We hope it will be the first of many such international exchanges.

None of this would be possible without the faithful financial support of people like you. We are grateful for your continued support and look forward to what we will achieve together in the coming year.

Yours in health,

Mike Rees
Dr. Michael A. Rees, MD, PhD
Chief Executive Officer
In July 2021, Alliance for Paired Kidney Donation announced that a kidney from a living donor traveled 612 miles across four states via ground couriers and commercial air transport with MediGO technology onboard. APKD partnered with MediGO to gain access to its next-generation hardware and software platform to ensure safety and reliability in the transport of donated kidneys from living donors. This partnership marks the first time a kidney donation registry has been able to benefit from this technology.

The logistics of living donation is complex. Kidneys often travel over long distances, requiring several exchanges between ground and air services. Whereas GPS could track ground movement, monitoring in the air was not possible as there was no way to track the kidney’s location or assess if it had been delayed in transport.

MediGO’s platform improves efficiency and provides critical real-time tracking and communications to the organ donation process by including a tracking device with each kidney during transport. This device transmits a signal that allows the kidney’s location to be tracked via a website interface.

“Until today, I could tell you more about my Amazon order than where our kidneys were in transit,” stated Susan Rees, APKD. “In our very first time using MediGO’s technology, this tracking innovation prevented a delay by alerting our transplant coordinator of an issue at an airport. We were able to intervene to ensure the kidney successfully reached its destination on time for transplant.”

As a result of this partnership, APKD’s transplant center partners will benefit as they can plan better, operate more efficiently and focus on patient care.

“Providing confidence to the lifesaving shipments has allowed our team to work alongside our transplant center partners in new and exciting ways.”

—Susan Rees, RN, APKD COO
Alliance for Paired Kidney Donation utilizes the MediGO technology to track the precious cargo of living donor kidneys here in the United States and abroad. This allows transplant coordinators to know the precise location and status of the kidney every step of the way.
Parties involved from both countries understood the magnitude of this event and worked tirelessly to ensure patients’ needs were always put first. “It was an honor to introduce this opportunity and work with representatives from both of these countries to initiate dialogue regarding transplantation and facilitate a historic agreement between the two countries,” stated Atul Agnihotri, chief growth officer of APKD. “It is extremely gratifying to know that all three female recipients and their donors are doing well and that our work made a difference, not only in the lives of these recipients but hopefully in the lives of many patients for years to come.”

APKD successfully facilitated a three-way kidney exchange procedure between donors and patients from UAE and Israel on July 28, 2021. This marked the first time that UAE and Israel collaborated on a lifesaving kidney exchange. Three hospitals worked in tandem with the UAE Organ Donation and Transplant Committee, Israel Center for Transplantation and APKD to clear the way for this historic and symbolic kidney exchange.

“This exchange demonstrates how we can harness our differences for mutual benefit,” stated Michael Rees, MD, PhD, chief executive officer of APKD and one of the world’s foremost authorities on paired kidney exchange. “APKD was created to lead innovation in the living donor kidney space, and we hope to connect the world to save more lives through kidney transplants.”

Kidney disease is a leading cause of death around the world. Kidney transplantation is often the only cure for patients with chronic kidney disease. Kidney failure patients often have donors willing to help, but the patient and donor are incompatible, ruling out the possibility of a transplant, which was the situation for each of the patients involved in this case. Kidney exchanges make transplantation possible, as pairs of incompatible donors are matched and patients in need receive lifesaving kidneys.

During this exchange, a total of six surgical procedures took place, beginning with an Abu Dhabi-based donor donating a kidney to a patient in Israel. A relative of that patient donated a kidney to a patient at another hospital in Israel, and in turn, that patient’s incompatible donor donated her kidney to the Abu Dhabi-based recipient, who is the original donor’s mother. As a result of this exchange, three lives were saved, new transplantation regulations were developed and valuable relationships were formed. To make this exchange possible, APKD worked for months behind the scenes. UAE and Israel recognized how collaborating on this exchange would save lives.

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“It was an honor to introduce this opportunity and work with representatives from both of these countries to initiate dialogue regarding transplantation, facilitate a historic agreement between the two countries to enable this exchange, harmonize paired kidney donation standards, coordinate the logistics and ensure a successful outcome for all parties involved,” stated Atul Agnihotri, chief growth officer of APKD. “It is extremely gratifying to know that all three female recipients and their donors are doing well and that our work made a difference, not only in the lives of these recipients but hopefully in the lives of many patients for years to come.”

“My daughter did a noble deed, saving my life and the life of another mother in UAE. I never thought of my donor being a Muslim or Jew, because I believe all human beings are equal. I just hope people take example from my daughter. If they give while living, it will bring so much hope to those waiting for kidneys.”

—Asiag Yadidi Yafit, Jewish woman who received Khaled’s kidney. Her daughter, Shani, started the three-way exchange by donating her kidney to someone in UAE on behalf of her mother.
**Important Allies**

Thanks to the countless work performed by our transplant centers across the United States, APKD continues to grow each year in facilitating paired kidney donation. To support this important work, we funded three important initiatives.

**Competitive Standard Acquisition Fees**
APKD SAC fees are lower than many in other exchange groups, and we don’t add on fees.

**User-Friendly KidneyMatch Software**
Our innovative software provides an easy-to-navigate platform that makes it simple for users to locate a strong match for their incompatible pairs.

**Customer Service Focus**
Our concierge-level support allows transplant coordinators more time to do what matters most to them: support families and patients.

“I have been very fortunate to be a part of Michigan Medicine’s involvement with APKD. Being able to network with transplant centers across the country and develop working relationships with so many people geared toward helping patients get transplanted is very rewarding.”

—Chad Abbott, transplant coordinator for Michigan Medicine
APKD Monthly Webinars for Transplant Partners

We began a new webinar series for transplant coordinators to help foster community in 2021. This series provides helpful information about a variety of topics related to living and paired kidney donation.

Our core values of passion, innovation and leadership define everything we do.

We are passionate about our mission to secure a kidney for every patient in need. Multiplying the good through paired kidney donation is how we maximize the gift of life. To support our mission, we find innovative solutions within our processes and systems that will benefit both APKD and partners like you. Hand-in-hand with our valued transplant center partners, we strive to be a leader in the paired donation industry and serve as an example of how much good can be achieved through true collaboration.
Partners in Care

In support of APKD’s mission to save lives by securing a living donor kidney transplant for every patient who needs one, the transplant center liaison focuses on our valued transplant center partnerships. Our remarkable transplant center network makes donation and transplantation possible. At APKD, we pride ourselves with not only serving as a resource for all things related to paired donation but also working side by side with transplant centers as an extension of our team. **Rizza Loveranes, our transplant center liaison**, onboards, maintains and works closely with transplant centers to ensure the success of living donation.

“We can end the wait for a kidney transplant through paired donation. It is a humbling pleasure to work along with transplant centers who share the same passion and stewardship for the gift of life as APKD.”

–Rizza Loveranes, transplant center liaison

**APKD Network Benefits**

- **Best-in-class KidneyMatch software**
- **Unmatched Donor Protection Program**
- **Flexible, lower cost services**
- **Center support**
- **Better outcomes**
APKD covers the cost of transplantation-related expenses, including lost wages from time off work, travel expenses to and from the transplant center, food, lodging and fuel expenses.

65% of APKD donors have taken DonorProtect™ benefits. $260,862 in benefits have gone to support APKD donors.

APKD offers transplant center partners and their donors the most comprehensive donor support program in the nation. APKD understands that the selfless act of living kidney donation may present financial obstacles. We also recognize that transplant centers are sometimes challenged to complete the necessary paperwork to assist its donor. To offset this burden, our Donor Protection Program Coordinator Elizabeth Sherrill facilitates reimbursements, insurance coverage paperwork and NLDAC applications.

“I'm here to help support our donor heroes so that together we can save more lives through donation and transplantation.”

—Elizabeth Sherrill, donor protection program coordinator
Global Solutions

2021 Saw a Record Number of Transplants Facilitated with APKD Software

Alliance for Paired Kidney Donation leads the way in global kidney exchange through innovation and vital partnerships around the world. In addition to working with governments, healthcare providers and payers around the world to setup systems and processes that support paired kidney donation, APKD provides an industry-leading kidney registry powered by the Nobel Prize-winning algorithm of Dr. Alvin Roth of Stanford University. In 2021, APKD facilitated a record number of transplants. As more centers add their incompatible pairs to our database, the potential for transplants multiplies exponentially.

Our Algorithm Explained

The way the algorithm works in kidney transplants begins with data that we speak of as a compatible graph. You can think of a compatible graph as the participants in the kidney exchange, where patients and donors are pairs. Sometimes there are no direct donors, and sometimes there are people who are waiting for a donor kidney but don’t have a living donor. What the algorithm does is try to recommend a set of transplants to find the maximum gauged set of matches. So, it tries to find as many of those as possible, and strings them together in a chain, so surgeons can go ahead and accomplish those transplants.

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—Alvin Roth, PhD, winner of the Nobel Memorial Prize in Economics
Alliance for Paired Kidney Donation software is used on multiple continents around the globe. In 2020, our algorithm was used to create the longest kidney donation chain in history in Asia, with 10 donor surgeries and 10 recipient surgeries completed in five days, setting a new record.
Anil Konur received a donated kidney in the summer of 2021. Watch Anil's inspiring story.
In an amazing story, APKD helped facilitate a 12-person chain that was initiated by a billboard with a plea for a living donor for a patient in need of a lifesaving kidney. The chain resulted in saving seven people’s lives.

This story highlights a diverse group of people from various races/ethnicities and areas across the U.S., and how our differences can come together to benefit others. It began with Garrett Canning, who became inspired to donate a kidney after seeing a billboard. This was the missing piece of the puzzle. Scan the QR code below to watch the Today Show story:

BILeER BEGINNING

Meet Anil
Anil Konur was slowly dying on dialysis as he waited for a lifesaving kidney. One day, that call came.

“If I were to meet my donor’s family today, I would first offer my condolences for their loss and then thank them for their selflessness during their time of grief,” says Anil. To watch this incredible story of hope and transformation, scan the QR code on the opposite page and visit our YouTube channel.
Increased Security
We added multi-factor authentication to the login process to provide an additional layer of security and integrated multiple security tests and checks into our development process.

Expanded Capabilities
We added the ability to import and export a wider variety of files. Registrations can also be adjusted for missing data and with supplemental files, while a new discussion board allows for notes and communications related to a given pair. We also laid the foundation for internal matching, a feature that is slated to be released in 2022.

Better Outcomes
The addition of Ashby-Kalbfleish Graft Survival Rates to registrations provides useful information such as estimated outcomes between donor-recipient pairs. Multiple Discretionary Exclusion Criteria were created to improve match runs, while regional rights improvements allow users to perform match runs across a “Region of Regions,” which amplifies geographic scope and expands opportunities for all.
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We’re excited to share 2022 holds an even more feature-rich road map for KidneyMatch, with planned enhancements that emphasize our mission to save lives by securing a living donor kidney transplant for every patient who needs one. Some of those enhancements include:

- Migrating our hosting platform to AWS for increased security, reliability and control
- Internal matching at the center level
- Pool Enhancement Points, the equivalent of frequent flyer miles for those centers that continually enhance our pool of donor/recipient pairs
- A variety of new data integrations
- A variety of user interface improvements

What’s on the horizon for KidneyMatch software?

Dr. Rees and Rob Green collaborate on future APKD software advancements.
In August 2019, I got the call that more than 100,000 people across the United States are still waiting to hear: I was a match for a lifesaving organ transplant! I felt as though I had just been accepted to the college of my choice.

I understood that I was the recipient of a precious gift and that the best way to honor my donor was to care for that gift. In effect, I had been given the gift of a future. My kidney transplant surgery took place when I was in my early 60s and coincided with the inescapable fact that I was in a transitional stage of life. I had survived a medical crisis, and I knew that life would never be the same. Rather than speculate on why I had been the recipient of such good fortune, I focused on what could I do to ensure that others could benefit from my experience. The answer came in the form of a magazine article about the Alliance for Paired Kidney Donation. The APKD’s mission and vision were contagious, and I saw it as an opportunity to change someone’s life in a profound and concrete way by giving the gift of financial support to APKD.

I can’t say that I’m a better person for having gone through this challenging, scary and incredible experience than I was before surgery—that’s for others to discern. I just know how fortunate I am, and I’m grateful that I can give back in a way that’s meaningful to me.

Giving is powerful and rewarding, and it can take many forms. The Alliance for Paired Kidney Donation offers the unique opportunity to give someone a future—the same way I was given a second chance at living. I invite you to join me and learn how contributions can help support transplant recipients and living kidney donors at PairedDonation.org.

“My transplant experience strengthened my belief in the transmutable power of giving and generosity.”

—Anne Kaplin, kidney recipient and APKD supporter
As a non-profit organization, we rely on donations and grants to fund our operations and benefits for our living donor heroes. Your generosity makes our work happen! Financial contributions mean we can continue supporting people through services like our Donor Protection Program.

What does your donation provide?

$100 provides a month of immunosuppressive drugs.
$250 provides meals and travel for surgery for a kidney donor.
$500 covers the housing costs of a donor or recipient.
$1,000 reimburses lost wages for a kidney donor.

Connect with APKD
Keith Conti, director of philanthropy, joined our organization in 2021 to help us ensure every patient who needs a living kidney transplant gets one. To discuss how you can help APKD meet its philanthropic goals, contact Keith at keith.conti@paireddonation.org.